THE WESTINGHOUSE ELECTRIC AND MANUFACTURING COMPANY, THE GENERAL ELECTRIC COMPANY, AND THE PANIC OF 1907. II

The preceding portion of this discussion compared the Westinghouse and General Electric companies at the beginning of their fiscal year 1904–5—right at the opening of the year of expansion culminating in the panic of 1907. In this part of the work it was shown that the two concerns were fundamentally similar, so that any subsequent difference in their history would most probably result from differences in policy and not from differences in the conditions on which such policies were founded. Further, certain divergences in the condition of the two concerns were set forth, and were related to points at which the policies of the two concerns varied. Some estimate as to the safety of these policies, finally, was made, this opinion being based partly on the differing conditions to which the policies already had led, and partly upon the unfavorable business conditions which it might be expected would follow and which, as a matter of fact, did follow. This second section will consider, first of all, what the course of business conditions was during the period 1904–7, and secondly, the way in which the two concerns, holding to the differing policies already described, met the conditions and as result finished the period in totally different situations.

The panic of 1907 and the years preceding have been too well discussed elsewhere to need any attempt at complete description here. Only in so far as there were special features related to the electrical supply business does the period need discussion at all. It may conveniently be divided into four parts. The first extended from 1904 up to the spring of 1907; the second continued until the middle of the summer of 1907; the third ended with the crisis proper, in the latter part of October; and the fourth, the long months of dull business following, extended well into 1908. With this last, the present study is not concerned, for, with the Westinghouse company in the hands of a receiver, as it was at the

end of the crisis proper, there could be no further basis for a comparative study.[1] The first period was one of unprecedented growth for the electrical industry in general, and for the two companies in particular.[2] Thus the opening months of the fiscal year 1907–8 saw both concerns carrying the largest volume of business in their histories.[3] With the second period, however, trouble commenced. Since the latter part of 1906, money had been increasingly scarce, and interest rates had been climbing. In March, 1907, the sudden break on the New York Stock Exchange began the depression in earnest.[4] The electrical business was apparently still going forward under the impetus of the excessive advance of the preceding months, and did not suffer in any specific way. Nevertheless, in common with most other large corporate industries, it felt two untoward effects of the depression: its stocks declined in value, along with the rest of the list; and it had to seek funds in a money market that was in a frame of mind far from favorable. The third period saw matters going from bad to worse. A summer of apathetic dulness was followed by a spasm of activity in certain of the copper shares on the New York Exchange. The sudden collapse of this movement, the consequent failure of the Knickerbocker Trust Company, and the accompanying slump of shares on the New York Stock Exchange brought the crisis to a head. For a large part of this time, the two corporations under consideration did not vary much from any of the dozens of other

[1] The reorganization itself has been admirably treated by Dewing, *Corporate Promotions and Reorganizations*, and the history of the reorganized company is the history of another Westinghouse company—a company from whose management Mr. Westinghouse himself was shut out, and a company committed in a very large measure to policies of the same sort as those by means of which the General Electric Company had so successfully weathered the panic.

[2] *Thirteenth United States Census*, XX, 281; also annual reports of two companies. When it is remembered that the decade 1899–1909 included a depression at either end, it becomes clear that the expansion during the three years of prosperity in which the greater part of the decade's increase came must have been enormous.

[3] *Chicago Economist*, XXXVII, 714; General Electric *Annual Report*, January 31, 1907.

[4] Current financial periodicals have been used as authorities throughout this portion of the work; also Henry Clews's *Fifty Years in Wall Street*, and A. D. Noyes's *Forty Years of American Finance*.

large industrials attempting to ride out the storm. Business fell off steadily and collections grew constantly poorer.[1] Loan rates were still advancing, and the securities of both corporations were falling to lower and lower levels.[2] Then, in the midst of the October break, both corporations became suddenly conspicuous. The Westinghouse company filed a voluntary bankruptcy petition.[3] Immediately the General Electric Company's strength was doubted by some, since both concerns had been considered equally sound, but the showing of the latter concern was seen to be so good that the uncertainty relative to it speedily disappeared.

It remains now to show what course of action each corporation adopted in meeting the conditions thus sketched, and how it was that at the time of greatest stress, the Westinghouse company suffered one of the most memorable receiverships of the year, while the General Electric was declared by the *Commercial and Financial Chronicle* to be "in the strongest financial position it has been in for years."[4] Both corporations consistently carried out the policies which have been seen to have existed in 1904. Hence, just as the differences in the condition of the companies at that time were ascribed to these differences in policy, so, it seems, the still wider differences in the midst of the panic should also be laid at the door of these same differing policies. These financial operations can most conveniently be considered separately for each corporation, and can be divided into periods corresponding roughly to those chosen for the general financial history of the period.

The General Electric financiering need be considered only briefly, for it presented little that was new. During the period of

[1] Both began laying off men in August. *Bradstreet's* reports decline of business and poor collections in its early October numbers.

[2] In August, the General Electric stock was down to 120, and the Westinghouse to 130. The fact that the General Electric stock was more widely held and more actively traded in on the New York exchange probably accounts for its unfavorable comparison with the other.

[3] On October 23, on the petition of H. H. Westinghouse, Mr. Westinghouse's brother, and the Atha Steel Casting Company.

[4] LXXXV, 1084.

expansion its ample margin of assets over liabilities was not only maintained, but was even increased.

	1904	1907
Total assets	$55,938,959	$86,245,289
Total liabilities	49,171,104	71,134,493
Excess assets over liabilities	$ 6,767,855	$15,110,796
Percentage excess (approximate)	12.1	17.8

New capital, which the expansion of business made imperatively necessary, was provided almost altogether by the issue of stock and scarcely at all by the incurring of debt. There were successive issues, totaling well over ten million dollars. The only debt undertaken during the same period, on the other hand, amounted to less than a million.[1] The former method of treating the income account was continued. Indeed, the corporation was not satisfied with the proportion of depreciation previously maintained, but taxed itself even more severely. In the first year of the period, the entire patents and franchise account was written down to the nominal value of one dollar. Dividend payments were kept relatively low in rate, and relatively high in bulk; interest payments not only remained comparatively small, but decreased both absolutely and relatively.

	1903–1904 Per Cent	1906–1907 Per Cent
Gross sales	100.0	100.0
Depreciations and deductions	8.4	9.8
Dividends	8.6	7.2
Interest	.18	.12
Interest and dividends	8.78	7.32
Surplus for year	6.7	5.1

So through the period of expansion the corporation met all the demands for new capital, and was, at the end, in a stronger position than when it had started.

[1] $10,484,850 stock and $666,607 debt. The latter was on indorsement of customers' paper. Working capital declined slightly in its ratio to quick and current liabilities, chiefly, it seems, because increased business volume necessitated the carrying of heavier monthly balances.

During the next period, that is, the beginning of the panic proper, the corporation was practically inactive, so far as financing was concerned. It raised some money by the sale of stock, but this issue had been authorized the year before and was really a part of the operations of the period preceding.[1] In the third period, however, the company undertook once more to obtain funds, this time in considerable quantity. The custom of the corporation was, moreover, abandoned for the time being, and the securities—something over twelve million dollars in amount—were put in the form of convertible bonds.[2] This may appear to be a change of policy, but seems rather to have marked simply another phase of the one existing. The country was by this time well within the grip of the depression; stock prices were low; pessimism prevailed; and new stock issues would be distinctly inadvisable. Bonds were more attractive to the investor, and more practicable, accordingly, for the purposes of the corporation. It was the logical emergency method of financial relief, for which the corporation had prepared by leaving its borrowing power relatively free until the emergency was indubitably present. It should be noted, moreover, that the bonds were convertible. In happier times, they could be exchanged for stock, and the company could be restored to its share-capitalization basis.

During the storm period of the October days, the corporation did the best thing it could have done: it did not attempt any financing at all, but got along with what it had—and got along excellently well. It had to borrow not a cent on short-time loans.[3]

So the panic of 1907 made no appreciable effect upon the General Electric Company. That concern had made a strong position stronger during the good years of 1904–7, by continuing in the ways it had been treading at the beginning of the period. And, when it fell upon evil times, it supplied its needs in part by borrowing funds, the quick obtaining of which its previous prac-

[1] $1,584,600 announced in a circular to stockholders, December 10, 1906.

[2] Ten-year convertible gold debenture 5's, $12,872,750.

[3] "The statement is confirmed that the company has not a note outstanding and has no current obligations other than monthly bills."—*Commercial and Financial Chronicle*, LXXXV, 160.

tices had insured, and, in part, by merely living off the fat of its accumulated resources.

Strikingly different is the way in which the Westinghouse company sought to meet its needs.[1] Throughout the three fat years, it continued the confident sort of financing it had been carrying on in 1904. The excess of assets over liabilities, which had been relatively small, continued to grow smaller, absolutely and relatively.

	1904	1907
Total assets	$48,432,188	$72,270,854
Total liabilities	37,400,083	61,522,691
Excess assets over liabilities	$11,032,105	$10,748,163
Percentage excess (approximate)	22.7	14.9

Though it was slightly increased,[2] working capital remained relatively small. Furthermore, the company persisted in padding its assets with securities of untried subsidiaries, speculatively valued, and in considering such concerns legitimate objects of investment outlay. It kept on gaining the greater part of the money that expansion demanded from loans, rather than from stock issues; and it also kept up the dividend rate on its stock, so that what shares it did issue would go at a premium. This last device of utilizing its high dividend rate as a selling point in disposing of securities was developed so that such a rate became practically a fixed charge.

All these points are so closely interrelated that they can most conveniently be discussed together. The company undertook to raise money from four different sources: a comparatively small amount of new stock, a block of collateral notes, a bond issue, and an increased lot of short-term loans. The stock sale is not significant. It was only a little over two million dollars, and belonged to an issue authorized in the period prior to the one here being

[1] Since both the periods of the panic itself came within the limits of a single fiscal year, and since the figures on margin of safety, depreciation, etc., are obtainable only from the annual reports covering the fiscal year, no statements on these points can be made.

[2] From 51.5 per cent of total quick and current assets to 58.7 per cent.

treated. The bond issue and the accumulation of short-time obligations belong together. The bond issue amounted to fifteen millions, and made rather detailed provision for the funding of the rapidly growing floating debt. The trouble was that the floating debt kept climbing too high to be overtaken by the bond issue. This must necessarily have been the case. Borrowing, as it had to, a large part of the funds for carrying on its manufacturing processes, on commercial paper and the like, the company was forced continually to pile up this floating debt as its business increased. So it was, that in 1907, even after the bonds had been issued and a funding of the debt attempted, the floating debt was over twelve million dollars, against nine million in 1904.[1]

It was, however, in the collateral note issue that the most striking features appeared. This loan amounted to four million dollars. It carried 5 per cent interest, and was due in the summer of 1907. It sold at $99\frac{1}{2}$ to $99\frac{3}{4}$. Its purpose is decidedly interesting. The funds obtained were largely to reimburse the corporation for the purchase from the Security Investment Company—its own finance subsidiary—of the Lackawanna & Wyoming Valley Rapid Transit Company. The road had been built by the Westinghouse interests, partly, it seems, "to demonstrate the possibilities of high-speed electric traction." It was twenty-two miles in length, and had cost about seven million dollars to construct. It was, however, capitalized at more than twenty million dollars, over ten million of which was in bonds. The road never had been able to keep up the interest on its bonds, let alone to pay anything on its stock.[2] The road was declared by Mr. Westinghouse to be "a vehicle of advantageously promoting the advertisement and sale of your manufactures." Here is perhaps the clearest case of the way the confusion of economic functions within Mr. Westinghouse's own personality reacted upon the corporation at whose head he was. With all the zealous enthusiasm of the promoter and inventor, he had built an unprofitable electric line valuable chiefly for "pro-

[1] \$9,378,033 and \$12,398,439. The increase is almost exactly 13.3 per cent.

[2] Various sources used, chiefly the report of Haskins and Sells to the receivers, financial and electrical manuals, and statement of Mr. Westinghouse, in *Commercial and Financial Chronicle*, LXXIX, 511.

moting the advertising and sale" of his products; he had grievously overcapitalized it; then he had sold it to his own Westinghouse Electric Company; and, finally, he had burdened the credit of that corporation by negotiating an outside loan in order to recoup the company for the venture. Nor was this all. The nature of the collateral and the terms at which it was hypothecated were even more startling. This security consisted of three lots. The first two were four million dollars in the bonds of the railway concerned and the debentures of the British Westinghouse Electric and Manufacturing Company.

The third was the assenting stock of the Westinghouse company itself. And it was stipulated that this last lot should, together with the British securities, be maintained at an "aggregate market value—at all times at least $2,000,000." There was only one way to maintain this market value with any degree of assurance, so far as the Westinghouse stock was concerned, and that was by maintaining the dividend rate at the high point to which it had been advanced. Here the vicious circles outlined in respect to the policies obtaining in 1904 become fused into one, and one which aided ultimately in dragging the corporation down into insolvency. In order to maintain high dividends, the corporation had elected to borrow a large part of its funds, and also to put much of its current resources into speculative foreign and domestic enterprises. Increase in business and the sinking of a large sum in one such enterprise forced the concern to borrow heavily at this period. In order to swing the loan, it had to bolster up the doubtful collateral offered by its own capital stock; and, to keep this stock available as collateral, it had virtually to guarantee the continuation of this same high dividend rate. In other words, the high dividend rate had become practically a fixed charge in connection with the debt incurred partly to make this same dividend rate possible. Other factors, of course, there were in the case of this particular loan, such as the optimism and blurring of functions just described; but this one practice of hypothecating the concern's own capital stock was later to become so closely bound up with the fortunes of the corporation, that it has seemed proper to stress it at the point of its first appearance.

It was said that the proceeds of this collateral loan were largely for reimbursing the purchase of the electric line. A further objective of expenditure was "extension of the company's business abroad." It is enough to say that further money was advanced to existing projects and that new ones were formed, while the notes and securities representing these advances of support were assiduously written into the assets side of the Westinghouse company's statement. One of the enterprises proved to be a total loss;[1] two others reduced their capitalization very materially before the year was out.[2] In this first most unfortunate of the projects, the company sank over three million dollars. These facts may give a sufficient idea as to the safety of the corporation's policy with regard to its foreign companies.

The treatment of income during the approach to the panic is the last point to be considered. It was a logical carrying out of what was seen to be taking place in 1904. Depreciation charges remained low; interest and dividend charges mounted even higher than they had in the former period. In fact, the increasing amount of floating debt and the rising rate of interest on it were probably the chief factors in pulling the surplus down almost to the point of extinction.

	1903–4 Per Cent	1906–7 Per Cent
Gross sales	100.0	100.0
Depreciations and deductions	2.0	2.0
Dividends	7.5	7.5
Interest—estimated for 1904–5	3.1	4.8
Interest and dividends	10.6	12.3
Surplus for year	12.3	2.0

During the three years leading up to the panic of 1907, the Westinghouse company had, then, met its immediate needs indeed; it had financed all its projects, and it had found sufficient floating capital to keep pace with the expansion in its business. It had not, however, provided at all, as had its competitor, for

[1] The Société Electrique Westinghouse de Russie of St. Petersburg (Petrograd). The writing down is reported in the *Annual Report* for 1910–11.

[2] The British Westinghouse Electric and Manufacturing Company lopped £1,375,000 off in January, 1907, and the Société Anonyme Westinghouse cut in half its outstanding capital, shortly after.

the eventualities which the panic, already lowering upon the financial horizon, might bring. To what extremes it was put when cessation of prosperity actually set in may be seen from a record of the corporation's further transactions.

Three notable steps were taken during the second portion of the period, that is, from the spring to the mid-summer of 1907. In the first place, the corporation attempted to sell some five million dollars' worth of new stock, at a premium of 50 points. The former premium having been 60, the reduction probably was a concession to the less optimistic temper of the security-buying public. The attempt was definitely unsuccessful,[1] and the cause of its failure is not far to seek. By March, Westinghouse stock was quoted on the New York Exchange at 136½, 13½ points below the subscription price of the stock. The ill-fated attempt is interesting, for it is almost the reverse of the General Electric Company's experience. The Westinghouse company had borrowed on every sort of security at times when it could easily have sold stock, until now, with a large bond issue just sold, and four million dollars in collateral notes falling due in midsummer, it could scarcely attempt any more of either. Sale of stock was the only resource left to provide the funds required, and the market conditions were poor, so poor that even this device failed. The corporation was paying dearly for its previous refusal to content itself with lower dividends and to maintain a reserve of borrowing power against such a situation as now confronted it. The General Electric Company had foregone such profits and had maintained such a source of reserve credit, with the result that it could, when stock issues were inadvisable, easily substitute a bond issue and get the funds wanted.

This Westinghouse issue might have been at least partly successful if it had not been offered at such an exorbitant premium. Yet the Westinghouse company could ill afford to do anything else, for, as will be remembered, its *stock* was hypothecated on one

[1] Only 33,066 shares out of the 100,000 offered were sold, at the time of the *Annual Report*, March 31, 1907, and Dewing states that only "Mr. Westinghouse and one or two other large stockholders" took shares (*Corporate Promotions and Reorganizations*, p. 182).

of its own loans, and the lowering of the price of its new stock would have lowered correspondingly the price of this other stock, and would accordingly have invalidated its own collateral. The cumulative effect of the various policies previously described begins now to make itself apparent. The Westinghouse company was almost helpless. Its further financial transactions followed out former policies, it is true, but by this time there were no other policies which it could very well adopt. It had to keep on maintaining itself by the same means it had chosen during the time when it had free choice, or not maintain itself at all. These methods, which had been largely responsible for bringing the concern into the straits where it now was, could not now be expected very soon to bring it out of them. Nor did they. So it is that the other two financial operations attempted by the Westinghouse company during this opening period of the panic gave little more relief than the first. The one was the refunding of the collateral note loan discussed at some length above.[1] It is worth remarking that the interest rate was 6 per cent, 1 per cent above that at which the original loan had been negotiated, and that the discount was $97\frac{1}{2}$, two points below the price of the original. This means that the loan was not refunded in its entirety, but that the company received less cash and had to pay more interest for a loan of the same nominal amount. But the most important feature relates to the collateral. It now contained three million dollars in the stock of the British Westinghouse Company and of the Westinghouse Electric Company proper against two million for the original loan. Since the British Company had already cut its stock, the increase most probably came from the parent corporation. That is to say, the pound of flesh which the Westinghouse company had originally to pledge for the loan had been retained and increased in the renewal of the loan. And all the dangerous features connected with the original hypothecating of its own securities were now repeated and made more serious by this larger hypothecation.

There is another point connected with this note issue which cannot be passed over, because it indicates, once more, how the intricacies of management and interests characterizing the West-

[1] *Supra*, pp. 388–90.

inghouse organization operated to undermine it. The *Annual Report* of March 31, 1907, stated that the Security Investment Company had purchased for $30.00 a share, 30,000 shares of the Lackawanna & Wyoming Valley Rapid Transit Company and that the proceeds of the sale would "provide for all the costs in connection with the issue and sale" of the new note issue. The true inwardness of this statement involves inquiries too devious here to be reproduced. Some notion, however, of the real gain to the company from this sale may be derived from the statement that the stock had originally never paid a dividend; had been given as a bonus to the Westinghouse company when that concern bought the Lackawanna bonds from the Security Investment Company; was paid for by the Investment Company, not with cash but with its own note; and was used, finally, as security for the note representing its purchase price. That is, the Westinghouse company wrote into its assets $90,000, represented by nothing more tangible than 30,000 shares of worthless stock, reposing in its vaults as collateral for their own purchase price.[1]

The final source of funds called upon by the Westinghouse company at this time was the expansion of its short-time loans. These had amounted to something over ten million dollars at the opening of the fiscal year. The report to the receivers placed them at over thirteen millions at the time of the receivership.[2] This makes an increase approximately of 30 per cent in six months. Two factors should be noted with reference to this swelling of short-time obligations. First, the interest rate must have grown progessively greater; secondly, with income falling off as business decreased, the funds out of which to pay these increased interest charges must have grown continually smaller. In other words, the corporation was not merely pyramiding the liabilities against its current assets: it was also piling up, at a constantly increasing ratio, the charges against a rapidly diminishing income. And

[1] The most of this has been drawn out of the report of Haskins and Sells to the receivers. The report enigmatically states, "We are unable to give any information as to the value of the notes of the Securities Investment Company or of the collateral referred to as security therefor."

[2] $13,461,609. The $12,398,439 given above as of 1907 includes all quick and current liabilities, not merely short-term loans.

the company could not even help itself by appropriating dividend money for the emergency, since any lowering of dividends would reduce stock values, and knock the support out from under the collateral-notes loan. A breaking-point must soon be reached, unless the corporation encountered great good fortune.

The breaking-point did come shortly. There was only one further important piece of financing before the crash came. This was put through at the end of the third period, that is, the one extending from midsummer up to the tensest moments of the depression. On October 1, 1907, the Westinghouse company secured something over two and a half million dollars on a ten-year loan, covered by a miscellaneous lot of collateral, and generally called the "French loan."[1] The only item worth mentioning in connection with this final effort at warding off disaster is the fact that on a large part of the collateral, the company still owed money.[2] That is, the "French loan" represented, in part at least, a double obligation.

The end came three weeks later. Its immediate cause was stated by Mr. Westinghouse as "the sudden decline in the market value" of the stock of the Westinghouse Machine and Electric companies, which "made it impossible for us to margin our loans." It is likely that, toward the last, Mr. Westinghouse had borrowed money on his personal holdings of Westinghouse stock, and advanced this to his companies.[3] Hence the drop in security prices accompanying the dark days on Wall Street would so far reduce the value of the security on which the corporation probably, to a very large extent, was subsisting, as to invalidate the loans, and make the receivership follow. Nor must the large block of Westinghouse stock underlying the collateral-note loan be forgotten.

It does not, however, seem justifiable to accept Mr. Westinghouse's further statement that "necessity for the receivership

[1] $2,702, 702.

[2] The collateral included $322,000 in stock of the Canadian Company, and the report of Haskins and Sells to the receivers carries an item of $1,559,514 as due on subscriptions to the Canadian and French securities.

[3] Mr. Westinghouse's statement spoke of "loans of the Security Investment Company and myself . . . . secured . . . . chiefly by the stocks of the Electric and Machine companies."

is due solely to the acute financial stringency and consequent inability to renew our maturing paper." It seems no more reasonable to assign the receivership "solely" to this, or to any other one cause, than it would be to credit the fall of a fortress to that particular mortar, out of a dozen pommeling it, which happened to fire the shell striking at the time of its collapse. The fortress might not have succumbed if that particular shell had not struck it, and the Westinghouse company might not have become bankrupt had not it met the unfortunate coincidence of a decline in its securities and the time for renewing its short-time loans. Yet, in each case, the disastrous effect of the final shock must be laid to the existing weakness due to a succession of previous blows.

With this, the comparative study of the financial operations of the General Electric Company and of the Westinghouse Electric and Manufacturing Company, through the panic of 1907, comes naturally to a close. The various points which the discussion has sought to make have been discussed pretty thoroughly at the points in the narrative at which they have appeared. Hence only a brief recapitulation is necessary. On October 23, 1907, the Westinghouse company was in the bankruptcy court, while the General Electric Company was authoritatively declared to be "in the strongest financial position it has been in for years." And yet the two concerns had been similar in so many respects relating to the condition under which their business was conducted that the news of the insolvency of the one caused many persons to apprehend a like fate for the other. The sort of business they did; the way they set about to do it; and the general basis of capitalization and the margin of operating profits, with which they had to finance the doing of it, were much the same with one as with the other. Nevertheless, as far back as 1904—at the opening of the three years' boom, of which the panic itself was largely a part—the two corporations were beginning to show differences in such portions of their financial structure as were predicated, not on matters of fundamental condition, but on matters of policy. The General Electric Company deliberately held its assets well above its liabilities, and was particularly solicitous about maintaining a large fund of working capital. It kept its borrowing power relatively

free, obtaining the greater part of its funds from the issue of stock, and remaining satisfied with the lower dividends which this less venturesome course forced upon it. Largely because of its insistence on keeping resources well clear of obligations, its income was heavily drained by depreciation discounts. Furthermore, its policy appertaining to the apportionment of its share and borrowed capital kept its total dividend payment large, but its interest payments more than compensatingly small. Finally, it was managed by a set of skilled men, each specializing on some one department, balancing and offsetting each other; so that no one interest was allowed to control beyond the point where it ceased to operate for the good of the entire corporation.

With the Westinghouse company the case was different. It kept its assets rather heavily laden with liabilities. It sought high dividends by keeping down its stock issues, and by supplementing them with bond issues at comparatively low rates of interest.[1] This borrowing policy it maintained especially in connection with the funds for its immediate needs, diverting a large amount of the surplus cash which it might have used in manufacture to investments of a sort not ordinarily considered suitable in the case of industrial companies, and also in loans to other Westinghouse concerns. This last characteristic of the Westinghouse financing was, in turn, largely due to the nature of the Westinghouse management—not a co-ordination of several distinct units, as in the case of the General Electric Company, but the result of domination by one titanic personality, in which various industrial and financial functions came together and often overlapped. Finally, this concern paid relatively little of its income for depreciation or dividends, but more than lost this advantage by the heavy interest charges on its debts, particularly its loans for working capital. And a regularly established device was the bolstering up of this income out of premiums from the sale of stock, a practice made possible by the high dividends, on which in turn the heavy

[1] The Westinghouse company explicitly expounded this policy in its *Annual Report* as of March 31, 1907: "It has been the policy of your directors and officers to sell new shares at the highest prices obtainable and to limit the issue of capital stock of the company to actual necessities, in order that substantial dividends may be paid, and large surplus earnings, applicable to your various requirements."

charges, making such bolstering necessary, were at least partially predicated.

With the approach to the panic of 1907, and the advent of the panic proper, the two corporations continued these opposed lines of action. As business expanded, the General Electric Company continued to maintain its assets at a still higher margin of safety, to keep its total charges to interest and dividends at a still lower point, and to raise the funds demanded by growth, in still larger proportion than at the opening of the period. When the depression finally came, it suffered loss of business, depreciation of securities, and difficulty in securing funds; nevertheless the leaving free of its assets and borrowing power enabled it to secure such money as it actually needed by bond issue, while its generous allowance of unobligated resources, particularly of those readily convertible into cash, enabled it so far to be self-sufficient that it found this one loan ample.

The Westinghouse company entered the panic more heavily burdened than it had been three years before, despite the fact that, like its competitor, it had encountered unprecedented prosperity. It had allowed its obligations to creep up upon its none too large surplus of assets, and it had still further reduced its borrowing power by incurring extensive obligations both in bonds, notes, and short-term paper. In the process of borrowing, moreover, it had put up some of its own stock as security, virtually guaranteeing to maintain the high dividend rate then being paid. The combined tax imposed upon its income by the high dividends and the high interest had come, finally, to leave very little that could be carried forward to surplus, despite the fact that the concern still supplemented its manufacturing profits with premiums on the sale of new stock. Finally, the Westinghouse company used much of the cash obtained by its loans, and left free by its borrowing of working capital, further to involve itself in investments of so hazardous a nature that most of them later returned only a portion, if any, of the money put into them. The panic intensified and revealed the weakness which had developed.

With its borrowing power already almost exhausted, the company tried to float new stock, but, because the price could not be

lowered without reducing the value of the stock already hypothecated upon the company's own loan, the concern was unable to offer it at a figure compatible with the state of the stock market. Then it had been forced to renew the loan necessitated in the first instance by its speculative investments, and had to do it not merely at a higher interest and discount rate, but also at the price of putting up a still larger portion of its own stock as security. Meanwhile, its small reserve of quick and current assets had proved insufficient to tide over the period of decreased earnings which the depression brought, and the company had to maintain itself by renewing and extending its short-time loans. Yet, in the face of increased cost for these loans, it found itself receiving decreased revenue with which to meet its interest payments. Nor could it get temporary relief by reducing dividends, for the recently enlarged portion of its own securities, held as collateral on the loans it had negotiated, precluded any such direct blow at the value of its securities. Toward the end of the period, a large part of its short-time loans were probably secured by its own stock—advanced in this case by Mr. Westinghouse. Although enabled, probably, to take up some of its inflated floating debt by a large loan which it was able somehow to carry through right on the eve of its downfall, the corporation was nevertheless in such an unstable condition that any one of a number of unfavorable circumstances might have toppled it over. The particular one which accomplished the work was a sudden decline in the entire stock list, the Westinghouse shares going down with the rest, which made worthless the loans obtained on the security of these shares, and thus made it impossible to renew these loans, and thereby to keep the company in operation.

A dogmatic derivation of general principles from this particular case is dangerous. For one thing, there is the special circumstance which makes the story of the Westinghouse company largely peculiar, that is, the influence exerted by such a personality as that of Mr. Westinghouse himself. There probably never will be another combination of financial policies quite similar to that displayed in its history. This much, however, seems clear. In meeting practically identical conditions, the General Electric policies succeeded; the Westinghouse policies failed. The par-

ticular combination of policies followed by the one may be accepted as likely to result favorably, and those of the other, at least as predisposing to insolvency. Furthermore, each particular policy, in so far as it was distinctive, has been shown to have contributed directly to the successful combination of policies, on the one hand, and to the disastrous, on the other. And it may consequently be laid down that, so far as the history of these two concerns shows, any or all of the body of policies governing the financial operations of the General Electric Company, through the panic of 1907, are legitimate and advisable, while those of the Westinghouse Electric and Manufacturing Company should be regarded with decided skepticism.

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